

Habitats

interior rivers and streams

Iowa Status

common; native

Iowa Range

statewide

Bibliography

Iowa Department of Natural Resources. 2001. Biodiversity of Iowa: Aquatic Habitats CD-ROM.

riffle beetle

representative species

Kingdom: Animalia
Division/Phylum: Arthropoda
Class: Insecta
Order: Coleoptera
Family: Elmidae

Features

Riffle beetles undergo complete metamorphosis (egg, larva, pupa, adult). The larva is less than one-half inch long and resembles a small torpedo. It has rings around its body, is pointed at both ends, and usually is gray. It has three pairs of jointed legs, each with a single claw. A trapdoor-type structure can close over the anal gills. The adult is a tiny, oval to elongate, black or gray insect. It has long legs, each with two large claws. The front wings are hard and meet in a straight line down the middle of the back when not in flight. The hind wings are membranous (thin, pliable) and fold under the front wings when not in flight.

Natural History

Riffle beetle larvae are aquatic and live in streams. Adults often are aquatic as well, although a few species are terrestrial. They eat diatoms and algae. Adults walk slowly under water, but must rise for oxygen. The female deposits eggs on plant materials in the water.